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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/048,060	01/28/2002	Kazuyuki Miya	L9289.02108	8754
24257	7590	01/10/2006	EXAMINER	
STEVENS DAVIS MILLER & MOSHER, LLP			YANG, LINA	
1615 L STREET, NW			ART UNIT	
SUITE 850			PAPER NUMBER	
WASHINGTON, DC 20036			2665	

DATE MAILED: 01/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/048,060

Applicant(s)

MIYA, KAZUYUKI

Examiner

Lina Yang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/23/02 1/28/02
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. Fig. 3 is objected for the following minor informality.

The drawings are objected to because "102 MACROCELL (SERVICE B)" was miss labeled for "102 **MICROCELL** (SERVICE B)". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

To be more specific, claim 1 starts with reciting "A radio communication system..." in line 3, then recites "a system of said first cell..." in line 8; and "a system of said second cell..." in lines 8 and 9; and finally recites "a system to which wanted..." in line 11. It's not clear how many systems are involved and how many systems are claimed.

Furthermore, claim 1 recites the limitation "the radio transmission method differs between a system of said first cell and a system of said second cell". It's not clear how transmission method could be different when the communication is *between* the systems? Does it mean that the transmission method from the first system to the

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second system is different than the transmission method from the second system to the first system? If it is, then the difference of the communication methods is for one-way communication, not two-way communication as "*between*" referring to.

In addition, claim 1 recites the limitation "the radio transmission method" in line 7. There is insufficient antecedent basis for this limitation in the claim.

Regarding claim 4, the phrase "it is possible to perform..." renders the claim indefinite because "possible" is not a positive and certain term.

Claim 4 recites the limitation "wherein it is possible to perform communication with said system of said first cell and said system of said second cell simultaneously on different channels". It's not clear who is performing the claimed communication(s).

Claim 7 recites the limitation "the station itself" in lines 24 and 25. There is insufficient antecedent basis for this limitation in the claim.

Regarding claim 7, the phrase "each cell" renders the claim indefinite because it's unclear how many cells are there in the system.

Claim 7 recites the limitation "a system selected by said selecting means" in line 27 on page 35 and line 1 on page 36. There is insufficient antecedent basis for this limitation in the claim. The system selected by said selecting means is a **cell** system.

In claim 9, lines 12-13, it is not clear as to what is intended to be the claim limitation by reciting " the communication terminal apparatus according to claim 7". If all means in the communication terminal apparatus are intended to be included in claim 9 as the claim limitation, the applicant is advised to rewrite claim 9 in independent form including all means in claim 7 for proper examination by the examiner.

Regarding claims 4 and 9, due to the nature of 35 U.S.C. 112 second paragraph issue as indicated above, no prior art rejection can be applied at this time.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351 (a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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3. Claims 7 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Lind et al. (U.S. Patent No. 6,163,694 B1).

Regarding claim 7, Lind teaches a communication terminal apparatus (230 in fig. 2) comprising:

monitoring means (device 270 in 230 in fig. 4) for monitoring downlink signals from each cell (col.4 lines 18-27) in a radio communication system that has an overlay structure (fig. 1) in which a first cell (L1, C1-CN in fig. 1) with a comparatively wide area and a second cell (L2, C1-CN in fig. 1) with a smaller area than said first cell are superimposed (col. 1 lines 28-59);

selecting means (processor 260 in 230 in fig. 2) for selecting a cell system to be connected to based on information monitored by said monitoring means (col. 4 lines 54-67 and col. 5 lines 1-4) and a connection request from the station itself (it's inherently satisfied since a mobile station has to select a cell to satisfy it's own request); and

communication connecting means (240 in 230 in fig. 2) for performing communication connection to a base station of a system selected by said selecting means.

Regarding claim 8, Lind further teaches that selecting means selects a system taking into account at least one item chosen from a group consisting of

service (310 "minimum strength and cell Hierarchy parameters" in fig. 3), communication environment, and speed of movement of the station itself, in said first cell and said second cell.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tabbane et al (U. S. Patent No. 5,701,586 B1) in view of Rinne et al. (U. S. Patent No. 6,201,966 B1).

Regarding claim 1, Tabbane teaches a radio communication system (fig. 1) whereby, in a radio communication system that has an overlay structure in which a first cell with a comparatively wide area ($CEL_{1,1}$ to $CEL_{1,J}$; col. 3 lines 21-36) and a second cell ($CEL_{2,1}$ to $CEL_{2,K}$; col. 3 lines 42-51) with a smaller area than said first cell are superimposed (col. 3 lines 56-57), the radio transmission method differs between a system of said first cell and a system of said second cell (col. 3 lines 58-64) and a mobile station selects a system to which wanted connection is desired from said system

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of said first cell and said system of said second cell, and performs communication with the selected system (col. 3 lines 65-67 and col. 4 lines 1-5).

Tabbane differs from the claimed invention in that Tabbane does not specifically teach that the second cell includes a channel with a high transmission rate. However, Rinne from the similar field of endeavor teaches that the smaller cells of lower hierarchy levels will be used by slowly-moving mobile stations and terminals requiring high transmission rates (col. 1 lines 57-63). Therefore, it would have been obvious for one of ordinary skill in the art at the time when the invention was made to include a channel with a high transmission rate in the second cell, as taught by Rinne in the assembly of Tabbane in order to provide high transmission rate to the slow-moving mobile stations.

Regarding claim 5, Tabbane further teaches that the mobile station selects a system taking into account at least one item chosen from a group consisting of service, communication environment, and speed of movement of the station itself (col. 1 lines 49-53), in said first cell and said second cell.

5. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tabbane et al (U. S. Patent No. 5,701,586 B1) in view of Rinne et al. (U. S. Patent No. 6,201,966 B1), and further teaches that in view of Beming et al. (U. S. Patent No. 6,628,942 B1).

Regarding claim 2, the modified assembly of Tabbane and Rinne differs from the claimed invention in that the modified assembly does not specifically teach that first cell and the second cell are controlled by a common control station and are connected to a telephone network via an exchange. However, Beming from the similar field of endeavor teaches that different cells can be controlled by a common control station (Core Network Service Node 16 in fig. 4) and are connected to a telephone network (12 in fig. 4) via an exchange. Therefore, it would have been obvious for one of ordinary skill in the art at the time when the invention was made to include first cell and the second cell are controlled by a common control station and are connected to a telephone network via an exchange, as taught by Beming in the modified assembly of Tabbane and Rinne in order to have better communication management.

Regarding claim 3, the modified assembly of Tabbane, Rinne and Beming further teaches that teaches that at least one system of said system of said first cell and said system of said second cell is connected to an IP packet network (14 in fig. 4) via a router (fig. 4).

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tabbane et al (U. S. Patent No. 5,701,586 B1) in view of Rinne et al. (U. S. Patent No. 6,201,966 B1), and further teaches that in view of Hottinen et al. (U. S. Patent No. 6,611,507 B1).

Regarding claim 6, the modified assembly of Tabbane and Rinne differs from the claimed invention in that the modified assembly does not specifically teach that a

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CDMA-FDD system is used in said first cell and a CDMA-TDD system is used in said second cell. However, Hottinen from the similar field of endeavor teaches that CDMA-FDD system is typically used in an outdoor wireless and a CDMA-TDD system used in a relatively short-range indoor wireless arrangement (col. 7 lines 12-28). Therefore, it would have been obvious for one of ordinary skill in the art at the time when the invention was made to include that a CDMA-FDD system is used in said first cell and a CDMA-TDD system is used in said second cell, as taught by Hottinen in the modified assembly of Tabbane and Rinne in order to facilitate different communication needs.

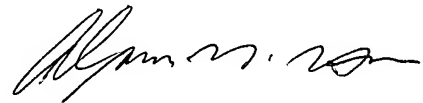
Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lina Yang whose telephone number is (571) 272-3151. The examiner can normally be reached Monday through Wednesday between 7:00 a.m. and 8:00 p.m. eastern standard time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LY



ALPUS H. HSU
PRIMARY EXAMINER